

# **Engineering Standards**

# Chapter 1 General Considerations

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#### 1-01 Applicability

These standards shall govern all new road construction and upgrade of facilities located within the City right-of-way, including, storm drainage systems, sanitary sewer facilities, transportation facilities, telecommunications and other development improvements required by the Mount Vernon Municipal Code.

#### 1-02 References

These standards are intended to be consistent with the most currently adopted Mount Vernon Municipal Code. In some cases, code updates are in-progress. Any discrepancies between the two will be resolved by the Public Works Director and Community and Economic Development Director.

#### 1-03 Primary Design and Construction References

Except where these Standards provide otherwise, design detail, construction workmanship and materials shall be in accordance with the most current edition of the following publications produced by the Washington State Department of Transportation (WSDOT) or jointly by WSDOT and the Washington State Chapter of the American Public Works Association (APWA), or American Society of Civil Engineers (ASCE), or National Association of Home Builders and Urban Land Institute:

- a. WSDOT Standard Specifications for Road, Bridge and Municipal Construction. These will be referred to in these Standards as the "WSDOT Specifications".
- b. WSDOT Standard Plans for Road, Bridge and Municipal Construction. These will be referred to in these Standards as the "WSDOT Plans".
- c. WSDOT Design Manual.
- d. Department of Ecology (DOE) Storm Water Manual for Western Washington.
- e. Manual Uniform Traffic Control Devices (MUTCD).
- f. WSDOT Construction Manual.
- g. Criteria for Sewage Works Design (State Washington Dept. of Ecology) Manual.
- h. A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials (AASHTO).
- i. Low Impact Development Technical Guidance Manual For Puget Sound.

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#### 1-04 Materials

All materials shall be new and undamaged and as approved by the City of Mount Vernon.

All materials shall comply with applicable sections of the American Standard Test Method (ASTM), the American Water Works Association (AWWA) and the APWA/WSDOT Standard Specifications.

When specific manufacturers or models are approved, no substitutions will be allowed without prior approval.

#### 1-05 Permits

Permits, approvals or agreements are required by the City and/or other agencies, prior to initiating any construction activity, including clearing/grading and/or other site disturbance activities. For specific requirements please contact the Community and Economic Development Department at (360)336-6214.

A pre-construction meeting is required with the Engineer of Record, Contractor, and Applicant before the issuance of a Fill and Grade permits.

#### 1-06 Plan Review

Civil construction plans and profiles are required for proposed road improvements, storm drainage facilities, sanitary sewer facilities, potable water facilities, stream channel improvements and other improvements as determined by the Public Works Director.

An engineering as-built or record drawing shall be required for review and approval prior to project acceptance. In some cases, these drawings will be required before the next phase of construction may proceed.

All construction plan sheets approved by the Community and Economic Development Department shall have the following approval block. See Appendix A.

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This plan sheet is approved for construction in accordance with the City of Mount Vernon ordinances and policies. Actual conformance of the design with applicable laws is the sole responsibility of the professional engineer, whose name and stamp appear on this sheet. Acquiring, complying with and providing mitigation for all Federal, State, County and Local laws, permits and mandates, including but not limited to the Endangered Species Act, Federal Wetland Permit, State Department of Fisheries Hydraulics Permit, Federal Flood Plain Permits, National Pollutant Discharge Elimination System Permits is the responsibility of the Developer, Landowner and their Engineer. The issuance of this permit shall not be construed as proof of compliance with applicable laws and permit requirements.

Approved By:	Date:
This approval will expire in one year from the d	ate noted above.

#### 1-07 Record Drawings

Engineering as-built drawings shall be submitted to the Community and Economic Development Department for review and approval prior to project acceptance.

The as-built drawings will be referenced during the final site inspection and a punch list will be generated identifying any deficiencies which arise during the inspection.

Upon approval of the as-built drawings the Engineer of Record shall provide the following:

- One clear and complete set of quality reproducible Mylar as-built drawings, stamped and signed by the Engineer of Record licensed in the State of Washington.
- One electronic record in TIFF and PDF-A format.

### 1-08 Inspection

- Call (360)336-6243 at least 24 hours in advance to schedule inspections.
- b. The City will appoint project engineers and inspectors as necessary to inspect the work.
- c. It is the responsibility of the developer, contractor or their agents to have an approved set of plans and permits on the job site at all times.
- d. The City reserves the right to require the developer to retain third-party testing to verify compliance with the Engineering Standards and approved plans.

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- e. It is the responsibility of the developer, contractor, or their agents to notify the City in advance of the commencement of any work.
- f. Failure to comply with the provisions of these Standards and other lawful directives may result in stop work orders, removal or correction of work, or other penalties as established by the Mount Vernon Municipal Code.

#### 1-09 Securities

Under certain circumstances or as required by City code, securities may be required to guarantee the performance, completion, and correction of permitted work.

Types of securities include but are not limited to cash deposits, assigned savings and bonds. Final project approvals and final occupancy permits are approved only after the completion of all required onsite and offsite improvements. Securities shall be released by the Community and Economic Development Department Director upon completion and successful final inspection of the required work and any previously specified stipulations related to the work being performed.

#### 1-10 Errors and Omissions

At the discretion of the City, any errors or omissions in the approved plans or information used as a basis for such approvals may constitute grounds for withdrawal of any approvals and/or stoppage of any or all permitted work. It shall be the responsibility of the Developer to show cause why such work should resume and make such changes in plans that may be required by the City prior to re-approval of the plans.

## 1-11 Site Maintenance

- a. The Developer or Contractor shall schedule and control their work so as to comply with all applicable provisions of the Mount Vernon Municipal Code and applicable state and federal codes to prevent any hazards to public safety, health, welfare, and public or private property.
- b. On existing roads or streets, two-way traffic shall be maintained at all times unless traffic control plans have been approved in advance.
- c. The Developer or Contractor shall keep roads, streets and pedestrian facilities free of dirt and debris at all times.
- d. The Developer or Contractor shall keep pedestrian facilities open and free of obstructions.

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e. The Developer or Contractor shall maintain pedestrian and vehicular access to occupied buildings at all times, except where written approval has been obtained from the City.

#### 1-12 Deviation from Standards

The City of Mount Vernon, in evaluating requests for deviations from these Standards, will utilize the following guidelines and criteria:

- Provide a formal written request to the Community and Economic Development Department. See form in Appendix B.
- The applicant shall present supporting information to justify the deviation being requested.
- The change requested shall achieve the intended results through comparable or superior design and materials.
- The proposed change shall not adversely affect long-term reliability, function, operation or maintenance.

#### 1-13 Plan Revisions

- a. Subsequent to approval of the construction drawings for the development, all requested revisions must be accompanied by a transmittal form.
- b. Plan revision requests must be sequentially numbered and signed by the design engineer and the project owner or their representative.
- c. Revisions must be submitted on revised plan sheets, in narrative form or both for approval signatures.
- d. An electronic copy of the approved plans is required for City files.

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